



Monkman, B.C.: Coal and gas together



## About the cover:

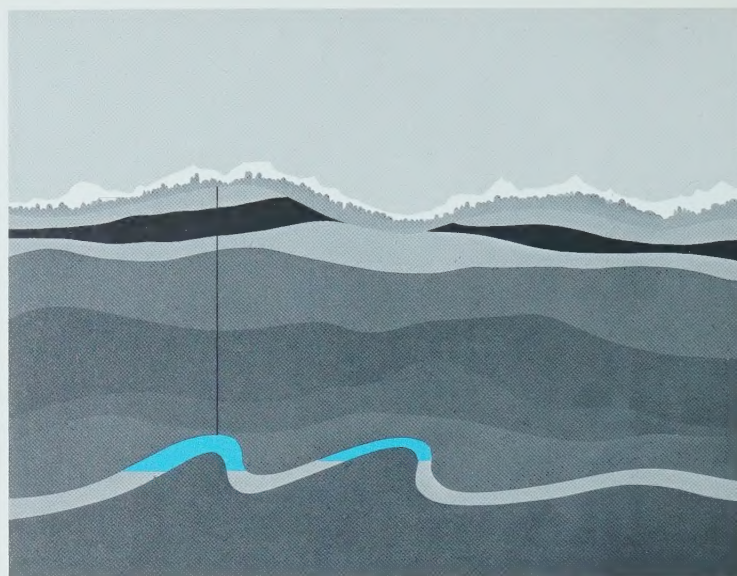
By a strange accident of geology, two of BP Canada's important energy assets lie beneath the same stretch of rugged terrain in northeastern British Columbia — one about 9,000 feet below the other.

A substantial part of the Company's extensive gas reserves in the Monkman area underlie the metallurgical coal seams which it is planned to develop during the 1980's as part of a \$400 million underground mining project.

At first glance, the two might appear to be linked solely by this geological curiosity. But there is another important link characteristic of the search for and development of new energy reserves: the need to invest very large sums of money at a considerable risk, with the prospect of having to wait many years for the investment to bear fruit.

When gas from these BP reserves starts flowing to market next year, it will begin to earn a return on an investment which began as long ago as 1957. Eight years of exploration were needed before the initial discovery was made. Finding and developing this gas, and building a pipeline to transport it, will have cost hundreds of millions of dollars, over more than 20 years, before it earns a cent.

The money required to finance new energy developments must largely come from the cash flows



provided by earlier successful ventures. The Monkman gas play was financed largely from the funds generated by BP Canada's operations elsewhere. In the same way, its earnings will help to provide the capital needed for the coal development and other costly new energy projects.

# Highlights for the year 1977

with 1976 figures shown  
on a comparable basis

	1977	1976	% change
	(Thousands of dollars unless otherwise stated)		
<b>Financial</b>			
Net income for the year . . . . .	\$ 40,290	\$ 32,112	+ 25.5
Net income per share (dollars) . . . . .	1.91	1.53	+ 24.8
Return on average capital employed (%) . . . . .	9.25	8.17	+ 13.2
Shareholders' equity at end of year . . . . .	363,901	333,096	+ 9.2
Revenue — sales and services . . . . .	737,200	625,967	+ 17.8
Total funds derived from operations . . . . .	83,286	64,795	+ 28.5
Expenditures on property, plant, equipment and research costs . . . . .	74,359	68,914	+ 7.9
<b>Operating</b>			
		(Barrels per day)	
Refined product sales . . . . .	107,552	105,529	+ 1.9
Crude oil processed at refineries . . . . .	127,723	128,246	— 0.4
Gross sales of crude oil and natural gas liquids . . . . .	22,128	21,349	+ 3.6
		(Thousands of cubic feet per day)	
Gross sales of natural gas . . . . .	122,685	104,926	+ 16.9

The Company's capital stock is listed for trading on the Montreal, Toronto and Vancouver stock exchanges. Cash dividends paid and the high and low prices of the Company's common shares on the Toronto Stock Exchange for the last two years are shown in the table.

	1977			1976		
	Dividends Paid	High	Low	Dividends Paid	High	Low
	\$	\$	\$	\$	\$	\$
First quarter . . . . .	11	11½	8%	10	11½	9¾
Second quarter . . . . .	11	14	10%	10	10½	9%
Third quarter . . . . .	11	14½	12%	10	9¾	8¼
Fourth quarter . . . . .	11	18	12½	10	9¾	7
Year . . . . .	44	18	8%	40	11½	7

# Report to the Shareholders

1977 did not, perhaps, live up to earlier hopes but, nevertheless, it was by no means a bad year for the Canadian oil industry. BP Canada was able to show substantial growth in earnings in both the refining and marketing and in the exploration and production sectors, which resulted in net income breaking the \$40 million barrier for the first time. These record earnings, representing an increase of 25.5 per cent over 1976, were achieved despite a somewhat disappointing fourth quarter.

The improved earnings in the refining and marketing sector were entirely attributable to operations in Quebec; in Ontario, fierce competitive pressures drove earnings below the 1976 level. In both provinces, margins remained at very unsatisfactory levels due to intense competition in the market resulting from excess refining capacity and the slow rate of growth in demand—averaging about 1.8 per cent in Quebec and Ontario. Unless the industry is able to show a quite unusual degree of restraint, it is hard to see much improvement occurring in this sector, faced as the industry is with the prospect of some 200,000 barrels per day of new petroleum refining capacity in Ontario this year.

In Western Canada, 1977 must be regarded as a banner year for the industry. Not only was it the year of decision for what has been billed as the world's largest privately financed engineering project—the proposed pipeline to transport natural gas from Prudhoe Bay, Alaska, through Canada to the U.S. lower 48 states and, perhaps, eventually from the Mackenzie Delta/Beaufort Sea area to Central Canada—but exploration activity in the Western Canada basin also broke all records. Additions to natural gas reserves again exceeded production and, for the first time in a decade, a major new oil play has developed—at West Pembina. While the full extent of these discoveries will not be known for some time, they are undoubtedly of considerable importance for the companies involved but are unlikely to alter significantly Canada's growing dependence on imported oil.

Happily, the prospects for natural gas are a great deal more encouraging and it is to the rapid development of this fuel and of oil sands that Canada must look to achieve her policy objective of energy self-reliance. This objective has been clearly enunciated, but one has to be seriously concerned by



the delays in implementation and by the lack of encouragement the government appears to be willing to offer the industry to tackle the vast, high-risk projects which are essential to its achievement.

In the course of the year, we have actively continued the exploration of our important gas prospects in the Monkman area of northeastern British Columbia and the National Energy Board has authorized the construction of the gas plant and pipeline necessary to bring this gas to market. The Sukunka and Bullmoose gas fields should be making an important contribution to our net income by 1980.

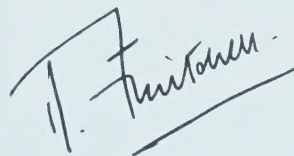
In the same geographical area, we are proceeding with the exploration of the metallurgical coal deposits we acquired last July. Mine planning for the first phase of development will be completed within the next few months. It is then our intention to proceed with the construction of the mine and related facilities just as soon as we have obtained reasonable sales commitments. We have been much encouraged by the exceptional quality of the coal from these properties and its high degree of acceptability to the steel industry.

Good progress has been made with the construction of our unique experimental heavy oil project at Marguerite Lake which should be commissioned next month. As previously reported, it is our hope that this project will demonstrate a more efficient means than has been available hitherto for recovering the huge quantities of heavy oil which exist in the Cold Lake area of Alberta.

Mr. W.A.L. Manson will not be standing for re-election to the Board at the forthcoming Annual and General Meeting since he will shortly be taking up a new appointment with the BP group in the United States. It is proposed to fill the vacancy on the Board by Mr. P.J. Gillam, who is presently General Manager, Supply Department, of The British Petroleum Company Limited in London and will shortly be assuming the position of a Director of BP Trading with special responsibility for Western Hemisphere operations.

BP Canada directly employs some 3,900 Canadian men and women, of whom 1,600 work in Quebec, some 250 being at our Executive Office in Montreal. Nearly 2,100 work in Ontario and some 240 in the western provinces of Alberta and British Columbia. I want to thank all of them for their continuing support and loyalty to our Company. I particularly want to express my appreciation to those

working in Quebec who, despite problems and apprehensions, continue to steer a steady course as they go about their duties. It is our clear intention to continue to develop our business in Quebec. We also intend to maintain our Executive Office in Montreal, unless compelled to move elsewhere by the unwillingness of the Provincial Government to give realistic recognition to the imperatives of a national head office.



D.F. Mitchell  
Chairman of the Board

March 9, 1978

# Exploration and Production

## Production and Sales

The Company's production of crude oil and natural gas liquids rose by 3.6 per cent to average 22,128 barrels per day, mainly as a result of the improved market for Saskatchewan heavy crude.

Natural gas sales averaged 123 million cubic feet per day, an increase of 16.9 per cent over 1976. This increase was due mainly to the inclusion of some 24 million cubic feet per day from British Columbia Oil Lands Ltd., which became a wholly-owned subsidiary in September 1976.

Sulphur sales increased from 197 to 310 long tons per day, but the average price received by the Company declined to \$12.90 per long ton from \$14.59 per ton in 1976.

## Western Canada Basin

Exploration and development work is continuing in the Monkman foothills area of northeastern British Columbia. BP holds a 100 per cent interest in 94,000 acres, and interests varying from 25 to 80 per cent in a further 252,000 acres. In 1977, an extensive seismic programme was undertaken to define extensions of the established structures and a further three development wells were drilled during the year — resulting in two gas wells and one abandonment. A fourth development well at Bullmoose is still drilling.

The six gas wells at Sukunka, East Sukunka and Bullmoose which have been production tested, have a delivery capability estimated at 239 million cubic feet per day of raw gas, equivalent to 175 million cubic feet per day of sales gas. Reserves of proven and probable raw gas for the three fields are estimated at 1,055 billion cubic feet. The Company holds an interest of approximately 71 per cent in these reserves.

The National Energy Board has approved the application by West-coast Transmission Company Ltd. to build a gas pipeline and treatment plant for the Monkman area, and it is expected that these will be in operation before the end of 1979.



The exploratory well BP et al Murray River d-48-1, 19 miles southeast of the Bullmoose gas field, was completed in early 1978 as a Triassic gas discovery with 300 feet of gas pay. Further exploratory and development wells will be drilled in 1978.

In the Peace River region of Alberta, BP participated in gas discoveries at Doe Creek and Pouce Coupé. Development drilling on earlier discoveries produced four gas wells and an oil well.

Exploratory drilling in the Livock area of northeastern Alberta resulted in seven gas wells.

These drill cores, from 1977 tests on BP's metallurgical coal properties in northeastern British Columbia, show coal obtained from one of the seams to be produced in the Company's underground mining development.



At the Stolberg gas field, where BP has a 20 per cent interest, treatment facilities and a pipeline are being built for completion by the end of 1978. One exploratory well is drilling.

In the shallow gas area of south-eastern Alberta, a further 35 development wells were successfully drilled on acreage in which BP has a 33.5 per cent interest. The Company now has interests in 297 gas wells in this region.

### Frontier Areas

Because of the continuing jurisdictional dispute between the Newfoundland and Federal Governments, BP confined its activities on the Labrador Shelf to conducting a seismic survey. The parties to the dispute have agreed to a joint reference to the Supreme Court of Canada but proceedings are unlikely to be filed until later this year.

In October, Newfoundland issued Oil and Gas Regulations covering the offshore lands and invited those companies already holding federal permits to apply for corresponding provincial

permits under these regulations. BP made such an application but, because the application did not fully comply with the regulations, the government did not award the Company any permits. It is unlikely that BP will be drilling on this acreage in 1978.

On Cameron Island in the Arctic, where BP has a 3½ per cent interest, two exploratory wells drilled by Panarctic were abandoned. A third well has been suspended for subsequent

evaluation. BP's share of the costs of the Cameron Island wells were borne by Panarctic, which is entitled to recover them from future production.

On Vanier Island, Panarctic drilled a well at Sophie Point which was abandoned. BP restricted its participation, as a result of which its interest in the acreage was reduced from 31½ per cent to 20 per cent.

A well on BP acreage on south-east Melville Island, at Beverly Inlet, is drilling. Seismic surveys run in the offshore area north of the Hecla gas field, where BP has a 6.2 per cent

Thickly-insulated flowlines at BP's heavy oil project near Cold Lake, Alberta, carry steam and air to strata deep underground and bring oil and water back to the processing plant.





**Reserves**  
(Gross Before Royalty)

	Oil and Natural Gas Liquids (Barrels)	Natural Gas (Billion Cubic Feet)
Proven Reserves at December 31, 1976 . . . . .	91,681,200	972.123
Add:		
Discoveries and extensions . . . . .	296,700	152.305
Net revisions to existing reserves . . . . .	118,500	10.309
	92,096,400	1,134.737
Less:		
Production during 1977 . . . . .	8,076,800	44.912
<b>Proven Reserves at December 31, 1977</b> . . . . .	<b>84,019,600</b>	<b>1,089.825</b>
Location of Reserves by Province		
Alberta . . . . .	66,921,900	727.927
Saskatchewan . . . . .	15,264,000	1.874
British Columbia . . . . .	1,833,700	360.024
	84,019,600	1,089.825

**Gross Quantities Sold — Crude Oil and Natural Gas Liquids**

	1977	1976
	Barrels per Day	
<b>Alberta</b>		
Redwater . . . . .	3,107	2,838
Pembina . . . . .	2,289	2,372
Chauvin . . . . .	2,156	2,282
South Sturgeon . . . . .	1,524	1,473
Swan Hills . . . . .	1,497	1,743
Kaybob South . . . . .	1,448	1,619
Harmattan . . . . .	747	628
Others . . . . .	3,401	3,268
Total Alberta . . . . .	16,169	16,223
<b>British Columbia</b>		
Beaton River . . . . .	826	808
Others . . . . .	32	33
Total British Columbia . . . . .	858	841
<b>Saskatchewan</b>		
Dollard . . . . .	1,438	952
Kenosee . . . . .	578	514
Weyburn . . . . .	531	521
Steelman . . . . .	437	484
Others . . . . .	2,117	1,814
Total Saskatchewan . . . . .	5,101	4,285
<b>Total All Areas</b> . . . . .	<b>22,128</b>	<b>21,349</b>

**Gross Sales — Natural Gas**

	1977	1976
	Million Cubic Feet per Day	
<b>Alberta</b>		
Edson . . . . .	35.5	37.6
Craigend . . . . .	7.6	6.6
Crossfield . . . . .	5.3	5.2
Pembina . . . . .	4.7	4.6
Monogram Unit . . . . .	4.3	5.4
Kaybob . . . . .	4.3	4.2
Atmore . . . . .	4.1	2.0
Cessford . . . . .	3.3	2.9
Others . . . . .	26.4	24.9
Total Alberta . . . . .	95.5	93.4
<b>Other Provinces</b>		
Yoyo-Kotcho-Cabin-Louise . . . . .	23.7	9.0
Others . . . . .	3.5	2.5
Total Other Provinces . . . . .	27.2	11.5
<b>Total All Areas</b> . . . . .	<b>122.7</b>	<b>104.9</b>

**Summary of Drilling**

	Oil	Gas	Dry
<b>Exploratory wells</b>			
Working interest . . . . .	—	3	20
Farmout (interest retained) . . . . .	1	14	13
<b>Development wells</b>			
Working interest . . . . .	15	67	10
Farmout (interest retained) . . . . .	—	5	3

**Land Summary**

	December 31, 1977		December 31, 1976	
	Gross Acres	Net Acres	Gross Acres	Net Acres
Arctic Islands . . . . .	105,632	3,533	105,632	3,533
Alberta . . . . .	1,796,812	1,012,217	1,905,250	1,135,848
British Columbia . . . . .	354,360	242,328	325,918	232,693
Saskatchewan . . . . .	124,969	58,462	124,969	58,462
Ontario . . . . .	25,995	11,001	25,995	11,001
Northwest Territories . . . . .	253,472	64,924	253,472	64,924
	2,661,240	1,392,465	2,741,236	1,506,461

**Reservations & Permits**

Alberta . . . . .	1,954,954	765,492	2,274,314	1,033,238
British Columbia . . . . .	1,108,029	454,520	1,119,410	437,917
Northwest Territories . . . . .	2,210,134	680,208	2,304,791	691,567
Arctic Islands . . . . .	6,723,552	908,477	7,244,792	1,027,066
East Coast . . . . .	13,717,377	8,199,198	14,156,312	8,418,661
North Sea — Great Britain . . . . .	51,323	5,774	51,323	5,774
	25,765,369	11,013,669	27,150,942	11,614,223

**Major Options**

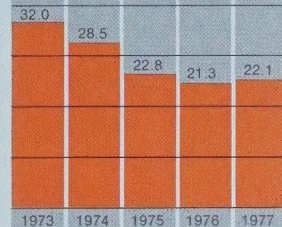
British Columbia . . . . .	93,798	25,207	45,540	11,385
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**Total Petroleum &  
Natural Gas Acreage**

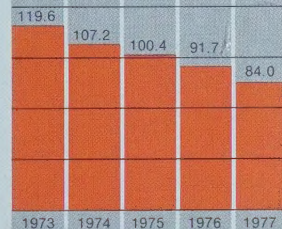
<b>Natural Gas Acreage</b>	28,520,407	12,431,341	29,937,718	13,132,069
Coal Acreage	107,773	73,314	145,133	91,696
Mineral Acreage	620,810	355,631	647,559	443,198



**Gross Sales — Crude oil and gas liquids**  
(Thousands of barrels per day)

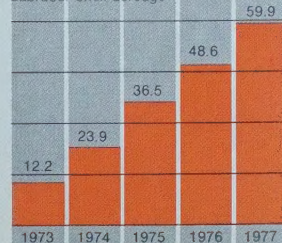


**Gross Reserves — Crude oil and gas liquids**  
(Millions of barrels)

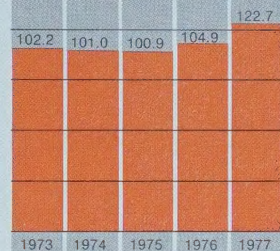


**Expenditures on exploration research and development**  
(Millions of dollars)

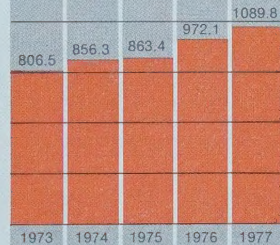
*Includes contributions by others to earn an interest in Labrador Shelf acreage*



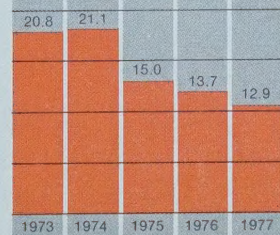
**Gross Sales — Natural gas**  
(Millions of cubic feet per day)



**Gross Reserves — Natural gas**  
(Billions of cubic feet)



**Net land holdings**  
(Millions of acres)



## Exploration and Production

(continued)

interest in 931,000 acres, have outlined several large structures. Following further seismic work, drilling may be undertaken in 1979 or 1980.

### Non-Conventional Oil

During the year, the Company pressed ahead with construction of the in-situ pilot project for the extraction of heavy oil near Cold Lake, Alberta, where it holds 75,000 acres of oil sand leases. Sixteen production test wells and a water disposal well have now been drilled and production is expected to start in the summer of 1978.

### Coal

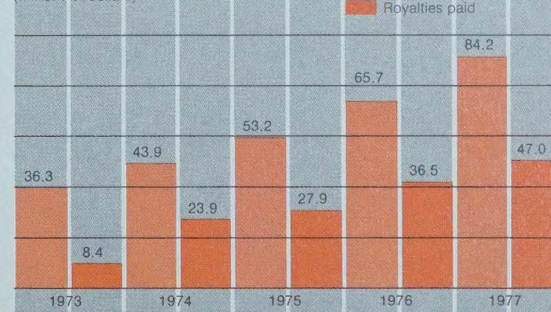
In mid-1977, following government approval, BP purchased certain metallurgical coal properties in northeastern British Columbia. These consisted of 13,900 license acres at Bullmoose and an 87½ per cent interest in 27,000 license acres at Sukunka.

Test core hole drilling and bulk sampling were carried out in 1977, and detailed planning for the first

phase of mine development is now well advanced. Under favourable circumstances the initial mine, capable of producing up to 500,000 tons of clean coal per year, could be in production by late 1979. However, because of the continuing depressed state of the world steel industry, it is likely that commissioning will be deferred until 1980. The Company's objective remains to develop the properties to their full potential of 3 million tons per year by the mid-1980's.

During 1977, 11 stratigraphic tests were drilled in the region of Grande Prairie, Alberta, where BP has extensive acreage in thermal coal

**Net proceeds compared to royalties paid**  
(Millions of dollars)





areas. The results of these tests and of others currently under way are being analysed.

### Minerals

In 1977 an exploration programme, including drilling, was undertaken in the Toadoggonne base metal prospect of central British Columbia, and extensive exploration work was carried out on the uranium prospects at Hornby Bay-Lac Rouvière in the Northwest Territories. In this latter area, the Company holds interests ranging from 50 to 100 per cent in 302,000 permit acres and 253,000 acres of claims. In addition, other base metal and uranium prospects were explored in British Columbia, Ontario, Newfoundland, Alberta and the Yukon Territory.

Minerals exploration will be expanded in 1978, with emphasis being placed on uranium projects in the Northwest Territories and Newfoundland.



This drilling rig in the Monkman area of northeastern British Columbia symbolizes BP's gas successes in the region. By the end of 1979, gas is expected to start flowing to market from the Sukunka, East Sukunka and Bullmoose fields by way of a pipeline and processing plant.



# Supply and Refining

The price of domestic crude oil, which is controlled by the Federal Government, rose by 70 cents per barrel on January 1, 1977 and then by \$1.00 on July 1. A further increase of \$1.00 on January 1, 1978 brought the price of the standard Alberta crude oil up to \$11.75 per barrel at Edmonton.

Meanwhile, members of the Organization of Petroleum Exporting Countries (OPEC) increased their crude oil prices by up to 10 per cent on January 1, 1977. As a result of that increase and of the decline in the value of the Canadian dollar against the U.S. dollar, by early 1978 domestic crude oil was being sold in central Canada at approximately three dollars per barrel below the international price.

**Total crude oil processed**  
(Thousands of barrels per day)



Importers of crude oil and petroleum products continued to be compensated by the Federal Government for that portion of the cost of the more-expensive foreign oil which they were not permitted to recover from the market.

Throughput at the Company's refineries averaged 127,700 barrels per day, virtually the same level as in 1976.

Some 70 per cent of the crude oil processed at Montreal Refinery in 1977 was Canadian crude, received through the extension to the Interprovincial pipeline system. The transportation cost between Toronto and Montreal continued to be paid by the Federal Government, thereby effectively equalizing the cost of crude oil in the two centres.

The crude oil processed at Trafalgar Refinery included 11,000 barrels per day from the United States which was acquired in exchange for Canadian crude oil sold to U.S. refiners.

At both refineries, increasing attention has been paid to energy conservation by way of improved maintenance and modifications to equipment and machinery. Energy consumption per barrel of crude oil processed has been reduced by 15 per cent over the past few years. BP Canada is a member of the Petroleum Refining Task Force on Energy Conservation recently formed by industry and government, and currently provides the chairman for this organization

At Montreal Refinery, equipment was added to the safety flare (background) to eliminate smoke, the furnace in the foreground was modified to recover more heat from flue gases and thereby to reduce fuel consumption as part of the Company's energy conservation programme



# Marketing

At year-end BP retail outlets in Quebec and Ontario numbered some 1,750, with an increased proportion — about one in eight — incorporating self-service pumps. As the demand for this type of convenience continued to expand, the industry's gasoline sales through self-serve outlets in the two provinces rose to an estimated 40 per cent of the retail market by the end of the year.

In response to the growing requirement for unleaded gasoline, the number of retail outlets offering BP No-Lead increased to over 1,600.

The Company became a major supplier to the United Co-Operatives of Ontario, which provides its



This improved wharf serving BP's terminal near Chicoutimi, Quebec, went into operation during the autumn

membership with farm and consumer supplies and a number of related services. Aviation jet fuel continued to be supplied to a number of major international airlines at Dorval, Mirabel and Malton.

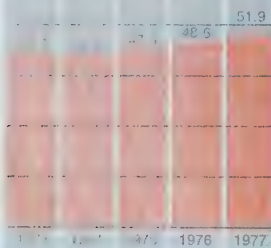
The commercial and heating oil sectors of the market, including rural distribution, were under severe price pressure throughout 1977. This was due to many factors: excess refinery capacity in Eastern Canada; a slow rate of market growth; changing marketing techniques; continued conversions from gasoline to diesel fuel by farm and commercial customers; and, in home heating, strong competition from gas and electricity in the larger centres. BP responded by further improving the cost-effectiveness of its facilities and operating methods, enabling the number of rural bulk plants to be reduced.

The Company continued to improve delivery efficiency during the year, with a consequent reduction in the number of vehicles required for this service.

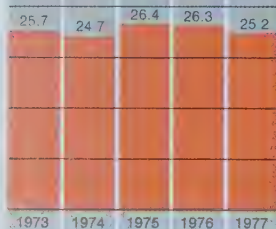
New wharf facilities for offloading petroleum products were completed on the Saguenay River, five kilometres south of Chicoutimi, Quebec. BP was responsible for supervising the construction of the shoreside installations on behalf of four oil companies. Since these facilities include separate systems for gasolines and distillates, offloading time has been cut almost in half. In addition to reducing environmental hazards, the new Chicoutimi wharf can now handle ships of up to 10,000 deadweight tons.

For safety and environmental reasons, steel underground product storage tanks at many marketing locations are progressively being replaced by tanks made of non-corroding, reinforced plastic. To date some 700 tanks have been changed.

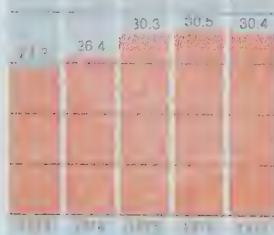
**Sales of gasoline**  
(Thousands of barrels per day)



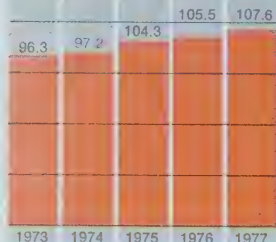
**Sales of middle distillates**  
(Thousands of barrels per day)



**Sales of heating oil**  
(Thousands of barrels per day)



**Total sales of petroleum products**  
(Thousands of barrels per day)





# Corporate Affairs

In 1977 the Canadian news media, and the public generally, showed increasing awareness of the danger of a serious energy shortage within the next decade. The Company, besides continuing its efforts to gain still wider understanding of this problem, emphasized the long-term nature of BP's programmes to develop new energy resources.

Company-wide preparations to convert to the metric (SI) system proceeded in accordance with timetables established for the Metric Commission sectors covering, respectively, petroleum exploration and production; coal; refining and marketing. Shipments from the refineries and product sales will be measured in SI units from January 1, 1979.

New refinery instrumentation was calibrated in the metric mode, while conversion began of old instruments. Most of the Company's retail gasoline pumps have been equipped with metric capability and the remainder will be converted during 1979.

Technical and clerical employees have attended training courses in metric conversion and additional courses will be held in 1978. The Company's business systems were analysed during the year in preparation for their conversion to the metric mode.

In Quebec, BP began working towards meeting the provisions of Bill 101, which was passed into law in August as The Charter of the French Language. A Francization Committee was established in November and the gathering of the data needed to analyse the Company's linguistic situation is well under way.

The Company's participation in three oil-spill prevention exercises provided useful training for employees

and underlined the necessity for close cooperation between the oil industry and the government agencies concerned with environmental protection. Similar exercises are planned for 1978.

BP's support of programmes designed to reduce traffic accidents involving young people was broadened by the launching of the BP Canada Road Safety Team. The team, consisting of two bilingual instructors, visits schools, playgrounds and parks in Quebec and Ontario teaching road safety drills to children in the 5 to 9 age group. In 1977 more than 60,000 children participated in the programme, which has been received enthusiastically by safety organizations, pupils and teachers.

BP films were shown to more than 15,000 community groups in four provinces. *Energy in Perspective* (which won the 1977 Grand Prix at the International Industrial Film Festival, Berlin) was made available for general distribution.

The Company increased its financial support of many organizations engaged in cultural activities, while continuing to provide funds for health and welfare and to colleges and universities in the provinces where BP is most active.



The BP Road Safety Show, organized in conjunction with the Ontario and Quebec Safety Leagues, was launched in the spring. Several thousand children took part in the show at the Canadian National Exhibition.

# Financial Review

Consolidated net income for 1977 was \$40.3 million, or \$1.91 per common share, an increase of 25.5% from the comparative 1976 earnings of \$32.1 million.

The consolidated net income represents a rate of return on average capital employed of 9.3% compared to 8.2% in 1976.

Revenue from gross sales and services was up 17.8% to \$737.2 million compared to \$626.0 million in 1976.

Consolidated net income for 1977, with comparative figures for 1976, was contributed by the two principal segments of the Company's business as follows:

	1977	1976
	(millions of dollars)	
Exploration & production . . .	\$ 27.6	\$ 23.1
Refining & marketing . . .	12.7	9.0
	<u>\$ 40.3</u>	<u>\$ 32.1</u>

Expenses rose by 15.0% to \$581.8 million, reflecting higher costs of purchased crude oil, the impact of inflation on salaries, wages, benefits, materials and services and higher charges for depreciation and depletion. Federal sales, excise, municipal and other taxes, royalties and provision for income taxes totalled \$186.0 million, an increase of 22.2%, including provincial royalties of \$44.6 million, which increased by 30.8%. Direct taxes on petroleum products collected on behalf of provincial governments amounted to \$136.1 million, an increase of \$11.2 million over 1976.

Total capital expenditure in 1977 was \$74.4 million, including \$0.9 million expended by others to earn an interest in the Company's acreage on the Labrador Shelf. The comparable figures for 1976 were \$68.9 million including \$4.6 million expended by others. A breakdown of this expenditure is as follows:

	1977	1976
	(millions of dollars)	
Resource exploration and development . . .	\$ 59.9	\$ 48.6
Marketing . . . . .	9.7	15.9
Refining . . . . .	4.8	4.4
	<u>\$ 74.4</u>	<u>\$ 68.9</u>

Repayment of long term debt in 1977 amounted to \$6.1 million, \$9.5 million was paid in dividends and provision for deferred income taxes in 1977 was \$14.4 million.

Total funds derived from operations amounted to \$83.3 million, an increase of \$18.5 million over 1976. These funds, together with other cash flow of \$5.8 million, were sufficient to finance net capital expenditure, repayment of long term debt and dividend payments, and an increase in net working capital of \$1.0 million.

The impact of inflation cannot be adequately reflected in the Company's financial statements which are prepared in accordance with generally accepted accounting principles on the historical cost basis. Thus the Consolidated Statement of Income reflects transactions at their historical costs, which in some cases differ significantly from current values.

Much effort in Canada has been directed to trying to devise presentations which better demonstrate the effects of inflation. In 1974, the Canadian Institute of Chartered Accountants promulgated guidelines for



accounting for the effects of changes in the general purchasing power of money by restating historical cost financial statements using a single general price index. Consolidated net income, restated on this basis, was \$22.7 million or \$1.08 per common share compared to \$40.3 million or \$1.91 per common share reported on the basis of historical cost. Similarly the return on average capital employed after restatement is computed at 3.9% as against 9.3% on an historical cost basis.

In June 1977, the Ontario Committee on Inflation Accounting recommended the disclosure of the inflationary impact on the funds' flows by isolating the effect of price level restatement for property, plant and equipment and replacement cost of inventories, and by assessing the impact of possible future borrowings to offset these effects. However, it proposed that mineral resource assets should be excluded from the inflation adjustment calculations because of unresolved problems in determining the funds required to maintain their operating capacity. Since resource assets represent about 50% of the Company's assets, the inclusion of a separate "Statement of Effects of Inflation on Funds Available for Distribution or Expansion", as recommended

by the Ontario Report, would not, in our opinion, be meaningful as such a statement could be taken as being an authoritative account of the total effects of inflation.

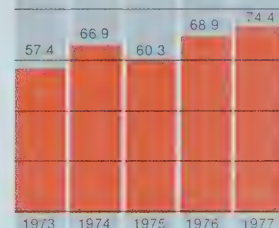
The Company, however, will continue to study recommendations to reflect the impact of inflation and will provide additional supplementary information as and when more comprehensive and acceptable systems for accounting for inflation are developed.

As recorded in the Summary of Accounting Policies, the Company follows the "full cost" basis of accounting for its oil and gas activities. The Financial Accounting Standards Board in the U.S. has, however, proposed that companies engaged in oil and gas production should adopt a prescribed form of "successful efforts" basis of accounting. The Company is engaged in a study to determine what the effect would have been had accounting been on the "successful efforts" basis and estimates that the consolidated net income for 1977 would have been reduced by less than 10%. The effect on net income of prior years has not yet been determined.

#### Expenditures on property, plant and research

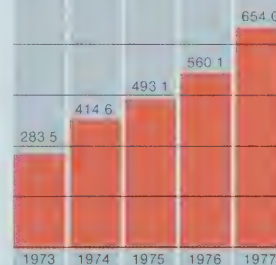
(Millions of dollars)

Includes contributions by others to earn an interest in Labrador Shear acreage



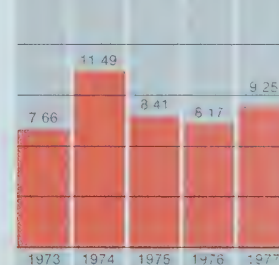
#### Net revenue

(Millions of dollars)



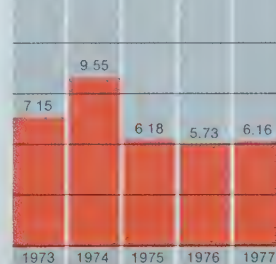
#### Return on average capital employed (%)

(%)



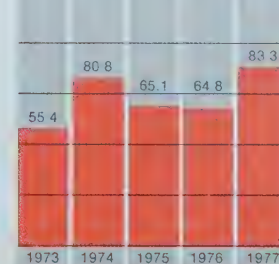
#### Net income per dollar of net revenue

(Cents)



#### Total funds derived from operations

(Millions of dollars)



# Summary of accounting policies

BP Canada Limited

The principal accounting policies of BP Canada Limited are as follows

## Investment in subsidiary companies

The consolidated financial statements include the accounts of subsidiary companies, all of which are wholly-owned. When a business is purchased, assets including goodwill and liabilities are recorded at their fair values at the date of acquisition and depreciation, depletion and amortization from that date are based on these values

## Property, plant and equipment; depreciation and depletion

### Marketing, refining and production assets

Property, plant and equipment includes the cost of land and facilities and of significant improvements thereto. Generally, depreciation is provided on assets on a straight line basis over their estimated useful lives which are as follows:

	Number of years		
	Refining	Marketing	Production
Buildings . . . . .	30 to 50	10 to 20	
Tanks and pipelines . . . . .	30	10 to 20	15
Equipment . . . . .	20	10	4 to 12
Automotive equipment . . . . .	5	5	5

## Exploration and development costs

The full cost method of accounting is used, whereby all costs related to the exploration for and the development of oil and gas reserves are capitalized, whether related to productive or non-productive properties. Proceeds received from the disposal of properties are credited against the costs, and the net costs, except as noted below, are amortized by the composite unit of production method based on total estimated proven reserves. Separate cost centres have been established for the Arctic and East Coast offshore activities and costs accumulated in these cost centres are amortized on a straight line basis over the period during which industry activity in each area is expected to continue, presently estimated to be until 1984.

Costs related to mineral exploration, excluding property acquisition costs which are amortized over the terms of the related leases, are charged to income in the year incurred

Coal mining development and property acquisition costs are capitalized during the pre-production phase. Amortization will begin at the commencement of commercial production.

## Research costs

In 1976, the Company established a field project to produce heavy oil from the Company's deposits in Alberta, the capital cost of which is to be amortized on a straight line basis over the project's planned ten year life. Other research costs are charged to income in the year incurred.

## Inventories

Inventories of crude oil, refined products and merchandise are valued at the lower of cost (determined on a first-in first-out basis, which for manufactured refined products is based on the average cost of manufacture for the year) and net realizable value.

## Sales and services

Sales and road taxes collected for the provincial governments have been excluded from sales and services revenue.

The Company purchases large volumes of crude oil from other producers, and sells to other companies in the oil industry whatever of its own net production and purchases is not required for its own refineries. The Company's practice is to apply crude oil sales to reduce crude oil purchases and thus exclude such transactions from both net sales and services and costs. The income statement, however, shows the Company's own production of crude oil at market value as a deduction from gross sales and services.

## Income taxes

The Company provides for income taxes on the tax allocation basis of accounting under which the provision for income taxes is computed on the basis of income reported in the financial statements rather than that reported in the Companies' tax returns. Taxes provided on income deferred for tax purposes by claiming deductions greater than the related charges in the accounts are reflected as deferred income taxes in the consolidated balance sheet.

## Foreign currency translation

Amounts in currencies other than Canadian dollars have been translated as follows: Current assets and current liabilities — at the rate of exchange prevailing at year end; long term debt — at the rate of exchange prevailing at the date the debt was incurred; revenues and expenses — at rates prevailing throughout the year.



# Consolidated Statement of Income

for the year ended December 31, 1977

BP Canada Limited

	1977	1976
	(thousands of dollars)	
<b>Revenue:</b>		
Gross sales and services (including crude oil sales from own production)	\$737,200	\$625,967
Less:		
Federal sales taxes	(37,358)	(29,133)
Crude oil sales from own production	(48,769)	(40,653)
Net sales and services	651,073	556,181
Income from investments	2,901	3,881
	<u>653,974</u>	<u>560,062</u>
<b>Expenses:</b>		
Purchased crude oil, products and merchandise	397,823	332,776
Operating and administration	146,749	136,884
Depreciation	19,878	19,406
Depletion	10,857	9,299
Research and mineral exploration costs written off	984	1,817
Interest and discount on long term debt	5,493	5,768
	<u>581,784</u>	<u>505,950</u>
Income before income taxes	72,190	54,112
Income taxes	31,900	22,000
<b>Net income for the year</b>	<u>\$ 40,290</u>	<u>\$ 32,112</u>
<b>Net income per common share (dollars)</b>	<u>\$ 1.91</u>	<u>\$ 1.53</u>

# Consolidated Statement of Retained Earnings

for the year ended December 31, 1977

BP Canada Limited

	1977	1976
	(thousands of dollars)	
<b>Balance, beginning of the year</b>	\$147,896	\$124,463
Net income for the year	40,290	32,112
	<u>188,186</u>	<u>156,575</u>
Dividends:		
Common shares	9,455	8,614
Preference shares	60	65
	<u>9,515</u>	<u>8,679</u>
<b>Balance, end of the year</b>	<u>\$178,671</u>	<u>\$147,896</u>

# Consolidated Statement of Changes in Financial Position

for the year ended December 31, 1977

BP Canada Limited

	1977	1976
	(thousands of dollars)	
<b>Funds derived from:</b>		
Net income for the year	\$ 40,290	\$ 32,112
Add (deduct) items not resulting in a flow of funds in the current year:		
Depreciation and depletion	30,735	28,705
Deferred income taxes	14,400	6,412
Profit on redemption of long term debt	(649)	(843)
Other	(1,490)	(1,591)
Total funds derived from operations	<u>83,286</u>	<u>64,795</u>
Proceeds on sale of property, plant and equipment	4,330	6,170
Other	1,485	480
Total funds derived	<u>89,101</u>	<u>71,445</u>
<b>Funds applied to:</b>		
Expenditures for property, plant and equipment	74,359	68,914
Less:		
Contribution by others (note 2)	(922)	(4,550)
Research and mineral exploration costs written off	(984)	(1,817)
	<u>72,453</u>	<u>62,547</u>
Repayments of long term debt	6,086	5,587
Dividends	9,515	8,679
Total funds applied	<u>88,054</u>	<u>76,813</u>
<b>Increase (decrease) in working capital</b>	<u>1,047</u>	<u>(5,368)</u>
<b>Working capital, beginning of the year</b>	<u>105,018</u>	<u>110,386</u>
<b>Working capital, end of the year</b>	<u>\$106,065</u>	<u>\$105,018</u>

See accompanying notes and summary of accounting policies

# Consolidated Balance Sheet

December 31, 1977

BP Canada Limited  
(Incorporated under the laws of Ontario)

	1977	1976
	(thousands of dollars)	
<b>Assets</b>		
<b>Current:</b>		
Cash and short term investments, at cost		
which approximates market . . . . .	\$ 11,244	\$ —
Accounts receivable . . . . .	116,740	100,311
Inventory, valued at the lower of cost		
and market . . . . .	115,614	108,072
Prepaid expenses and deposits . . . . .	2,694	2,290
Total current assets . . . . .	<u>246,292</u>	<u>210,673</u>
<b>Investments and advances:</b>		
Investments in other companies, at cost . . . . .	3,431	3,428
Mortgages, loans and other assets . . . . .	4,997	6,552
Total investments and advances . . . . .	<u>8,428</u>	<u>9,980</u>
<b>Property, plant and equipment, at cost</b>		
less accumulated depreciation and depletion (note 2) . . . . .	398,726	359,547
	<u>\$653,446</u>	<u>\$580,200</u>

On behalf of the Board



D.F. Mitchell, Director



M. Sauvé, Director

	1977	1976
	(thousands of dollars)	
<b>Liabilities and Shareholders' Equity</b>		
<b>Current:</b>		
Bank overdraft . . . . .	\$ —	\$ 624
Accounts payable and accrued		
liabilities (note 3) . . . . .	113,619	82,776
Income and other taxes payable . . . . .	25,514	21,181
Current maturities of long term debt . . . . .	1,094	1,074
Total current liabilities . . . . .	<u>140,227</u>	<u>105,655</u>
<b>Long term debt (note 4) . . . . .</b>	<u>71,918</u>	<u>78,449</u>
<b>Deferred income taxes . . . . .</b>	<u>77,400</u>	<u>63,000</u>
<b>Shareholders' equity:</b>		
Capital stock (note 5) . . . . .	185,230	185,200
Retained earnings . . . . .	178,671	147,896
	<u>363,901</u>	<u>333,096</u>
	<u>\$653,446</u>	<u>\$580,200</u>

See accompanying notes and summary of accounting policies



# Notes to consolidated financial statements

BP Canada Limited

December 31, 1977

## 1. Acquisition and development of coal interests

During the year the Company acquired certain interests in coal licenses in northeastern British Columbia. The purchase price was \$30,000,000 of which \$5,000,000 will be paid conditional upon completion of certain railroad and port facilities to be installed by other parties.

It is planned to develop the property represented by these interests for the production of up to 3,000,000 long tons of metallurgical coal per annum at an estimated total cost of \$400,000,000. It is expected that first production will commence in 1980 at a rate of about 350,000 tons per annum.

Under an agreement with the Company, BP Canadian Holdings Limited (which owns 65.5% of the issued common shares of the Company and which is a wholly-owned subsidiary of The British Petroleum Company Limited) undertook to pay one-half of the Company's acquisition and development costs and was assigned a 50% working interest in the Company's interest in the property. The agreement provides that the Company will pay its 50% share by paying all such costs in a period presently estimated to end in 1982; BP Canadian Holdings Limited will pay an equivalent amount of such project costs thereafter.

According to current plans such costs to be incurred by the Company in 1978 are not likely to exceed \$10,000,000.

## 2. Property, plant and equipment

		1977	1976	
	Investment at cost	Accumulated depreciation and depletion	Net investment	
			Net investment	
	(thousands of dollars)			
Exploration and production . . . . .	\$310,879	\$136,231*	\$174,648	\$159,966
Refining . . . . .	178,868	83,084	95,784	98,835
Marketing . . . . .	165,802	66,777	99,025	100,746
Coal mining . . . . .	29,269	—	29,269	—
	\$684,818	\$286,092	\$398,726	\$359,547

\*Includes depletion of \$105,529,000

Two companies have agreed to contribute an aggregate of \$38,000,000 for an exploration programme on the Company's acreage off the coast of Newfoundland to earn 55% of the Company's interest in that acreage. One of the companies has fulfilled its commitment of \$25,000,000 and the other has contributed \$5,472,000 out of a total of \$13,000,000. Expenditures incurred subsequent to fulfillment of the companies' respective contributions will be shared with the Company in proportion to the respective interests in the lands.

## 3. Accounts payable and accrued liabilities

	1977	1976
	(thousands of dollars)	
Accounts payable and accrued liabilities . . . . .	\$111,082	\$ 71,986
Due to affiliated companies for purchases of crude and product . . . . .	—	8,464
Dividends payable . . . . .	1,653	1,515
parent company . . . . .	884	811
others . . . . .	—	—
	<u>\$113,619</u>	<u>\$ 82,776</u>

## 4. Long term debt

	1977	1976
	(thousands of dollars)	
BP Canada Limited:		
6% Sterling loan maturing in 1983 . . . . .	\$ 5,361	\$ 6,336
(\$4,547,000 at 1977 year end exchange rate)		
7½% U.S. dollar Series A debentures, maturing February 15, 1993 . . . . .	21,906	23,898
(\$24,086,000 at 1977 year end exchange rate)		
8¼% Series B debentures, maturing February 15, 1993 . . . . .	22,000	23,500
Subsidiaries of BP Canada Limited:		
BP Oil Limited —		
5½% first mortgage sinking fund bonds Series A, maturing March 15, 1979 . . . . .	4,048	4,052
5¾% sinking fund debentures Series A, maturing October 1, 1986 . . . . .	19,303	21,316
Mortgage loans payable . . . . .	394	289
Other . . . . .	—	132
	<u>73,012</u>	<u>79,523</u>
Less current maturities included in current liabilities . . . . .	1,094	1,074
	<u>\$ 71,918</u>	<u>\$ 78,449</u>

Repayment and sinking fund requirements during the four years subsequent to December 31, 1978 are as follows:

1979 — \$5,151,000	1981 — \$5,042,000
1980 — \$5,049,000	1982 — \$5,005,000

## 5. Capital stock

	1977	1976
	(thousands of dollars)	
Authorized		
11,912	5% cumulative redeemable sinking fund preference shares of \$100 par value each redeemable for \$103 or at par for sinking fund purposes (12,185 in 1976)	
30,000,000	common shares without par value	
Issued:		
11,912	5% cumulative redeemable sinking fund preference shares (12,185 in 1976) . . . \$ 1,191 \$ 1,219	
21,016,023.8	common shares (21,011,023.8 in 1976) . . . 184,039 183,981	
	<u>\$185,230 \$185,200</u>	

At December 31, 1977 options were outstanding to officers and employees to purchase 297,000 common shares at a price of \$11.47½ exercisable annually to June 9, 1980. During the year options on 5,000 shares were exercised.

The Company redeemed for cash 273 preference shares during the year.

## 6. Pension plans

Based on the latest actuarial valuation of the pension plans as at December 31, 1976 all liabilities were fully funded by assets held by the trustees.

## 7. Commitments

Total rentals under leases expiring more than three years after the year end amounted to approximately \$22,000,000 of which \$2,500,000 is payable in 1978.

## 8. Other statutory information

The aggregate direct remuneration of the directors and senior officers of the Company was \$873,000 in 1977.

The principal operating subsidiaries of the Company are BP Oil Limited and BP Exploration Canada Limited

## 9. Anti-inflation program

Under the Anti-inflation legislation the Company is required to comply with controls on prices and profit margins to December 31, 1978 (other than those in respect of crude oil and natural gas which are controlled under the Petroleum Administration Act), on employee compensation to various dates ending December 31, 1978 and on dividends to October 13, 1978.

# Auditors' Report

## To the Shareholders of BP Canada Limited:

We have examined the consolidated balance sheet of BP Canada Limited as at December 31, 1977 and the consolidated statements of income, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the company as at December 31, 1977 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Montreal, Canada  
February 27, 1978

*Clarkson, Gordon & Co.*  
Chartered Accountants



## Five year financial summary

(Dollars in thousands except per share amounts)

BP Canada Limited

	1977	1976	1975	1974	1973
<b>Balance sheet</b>					
Current assets . . . . .	\$246,292	\$210,673	\$212,083	\$222,723	\$113,006
Current liabilities . . . . .	140,227	105,655	101,697	128,802	61,303
Working capital . . . . .	106,065	105,018	110,386	93,921	51,703
Investments and advances . . . . .	8,428	9,980	10,584	15,206	36,385
Property, plant and equipment-net . . . . .	398,726	359,547	329,833	316,994	291,392
Capital employed . . . . .	513,219	474,545	450,803	426,121	379,480
Deduct: Long term debt . . . . .	71,918	78,449	84,879	95,068	103,818
Deferred income taxes . . . . .	77,400	63,000	56,100	43,200	21,400
Shareholders' equity . . . . .	363,901	333,096	309,824	287,853	254,262
Per common share . . . . .	\$17.26	\$15.80	\$14.68	\$13.63	\$12.03
<b>Income</b>					
Net revenue . . . . .	653,974	560,062	493,149	414,550	283,475
Expenses . . . . .	581,784	505,950	438,869	343,576	249,731
Income before income taxes and extraordinary items . . . . .	72,190	54,112	54,280	70,974	33,744
Income taxes . . . . .	31,900	22,000	23,800	31,400	12,800
Income before extraordinary items . . . . .	40,290	32,112	30,480	39,574	20,944
Extraordinary items . . . . .	—	—	—	—	(684)
Net income for the year . . . . .	\$ 40,290	\$ 32,112	\$ 30,480	\$ 39,574	\$ 20,260
<b>Total funds derived from operations</b> . . . . .	<b>\$ 83,286</b>	<b>\$ 64,795</b>	<b>\$ 65,060</b>	<b>\$ 80,834</b>	<b>\$ 55,448</b>
<b>Per common share</b>					
Income before extraordinary items . . . . .	\$1.91	\$1.53	\$1.45	\$1.88	\$0.99
Extraordinary items . . . . .	—	—	—	—	(.03)
Net income for the year . . . . .	\$1.91	\$1.53	\$1.45	\$1.88	\$0.96
Dividends paid . . . . .	\$ .44	\$ .40	\$ .38	\$ .23%	\$ .15

## Five year operating summary

(Barrels per calendar day except natural gas)

Refined product sales . . . . .	107,552	105,529	104,310	97,164	96,253
Crude oil processed at refineries . . . . .	127,723	128,246	121,693	106,921	104,323
Gross sales of crude oil and natural gas liquids . . . . .	22,128	21,349	22,827	28,492	32,037
Gross sales of natural gas (thousands of cubic feet per day) . . . . .	122,685	104,926	100,945	101,043	102,167

R.M. Fowler, O.C., LL.D.,  
Honorary Chairman

#### **Board of Directors**

R.W. Adam — London, England  
A Managing Director,  
The British Petroleum Company Limited

Sir Eric Drake, C.B.E. — London  
England

R.W.D. Hanbidge — Montreal  
President,  
BP Canada Limited

W.A.L. Manson — London, England  
Director,  
BP Trading Limited

F.A. McKinnon, D.U.C. — Calgary

D.F. Mitchell — Montreal  
Chairman of the Board,  
BP Canada Limited

M.M. Pennell, C.B.E. — London, England  
Deputy Chairman and a Managing  
Director,  
The British Petroleum Company Limited

Charles Perrault — Montreal  
President,  
Perconsult Limited

The Hon. M. Sauvé, P.C. — Montreal  
Vice-President, Administration,  
Consolidated-Bathurst Limited

D.C. Smith — Montreal  
Vice-President, Finance, and Treasurer,  
BP Canada Limited

G. Meredith Smith — Montreal

P.N.T. Widdrington — London, Ontario  
President,  
John Labatt Limited

#### **Officers**

D.F. Mitchell,  
Chairman of the Board

R.W.D. Hanbidge,  
President

J.A. Barclay,  
Vice-President, Supply and Refining

E.W. Best,  
Vice-President, Exploration and  
Production

D.A. Deverell,  
Vice-President, Marketing

J. Langelier, Q.C.,  
Vice-President, Legal, and Secretary

D.C. Smith,  
Vice-President, Finance, and Treasurer

K. Healy,  
Assistant Secretary

J.I. Rawlinson,  
Assistant Secretary

K.T. Allison,  
Assistant Treasurer

F.D. Pynn,  
Assistant Treasurer

#### **Registered Head Office**

First Canadian Place  
Toronto, Ontario

#### **Executive Office**

1245 Sherbrooke Street West  
Montreal, Quebec

#### **Exploration and Production**

335 — 8th Avenue S.W.  
Calgary, Alberta

#### **BP House**

240 Duncan Mill Road  
Don Mills, Ontario

#### **Refineries**

Montreal Refinery  
Ville d'Anjou, Quebec

Trafalgar Refinery  
Oakville, Ontario

#### **Sales Offices**

Province of Quebec  
Montreal  
Quebec City  
Sherbrooke

#### **Province of Ontario**

Barrie  
Burlington  
Cambridge  
Chatham  
London  
North Bay  
Ottawa  
Toronto

#### **Transfer Agent and Registrar**








The Canada Trust Company  
Montreal, Toronto, Calgary, Vancouver

#### **Stock Exchange Listings**

Montreal, Toronto, Vancouver



# BP Operations 1977

-  Oil & Gas Exploration
-  Oil Production
-  Gas Production
-  Minerals Exploration
-  Coal
-  Refining
-  Products Marketing



